

Length 14.25; width 8.00; aperture length, 7.00; width 4.00 mill. adult.

Length 10.00; width 5.25; aperture length, 5.00; width 3.00 mill. juv.

Type locality. Hayes Creek, near Ward, Montana, in the Bitter Root Mountains, altitude 3825 feet.

Types in collection of L. E. Daniels.

This Lymnaeid belongs to the *palustris* group and is related to *Galba vahlii* ("Beck" Möller). It differs from that species in being more solid, the periostracum more polished, and the aperture rounder. The greatest difference is in the inner lip, which is roundly and evenly reflexed over the umbilicus, lacking the twist so noticeable in this group, and resembling in this respect such species as *Galba bulimoides cockerelli* and *Galba caperata*. Half-grown specimens might easily be mistaken for *Galba bulimoides*, the spiral lines and narrow umbilical chink, however, easily separating them. *Vahlii* has not been found south of the 55th parallel, and there is, therefore, a wide gap in the range of the two species.

The specimens at hand show some variation, one specimen being very obese; while another, which is believed to be typical, has a rather long, turreted spire. The young, half-grown specimens are always obese. The specimens were collected by Mr. L. E. Daniels in April 1912.

RADIX AURICULARIA AT CAMBRIDGE, MASSACHUSETTS.

BY W. F. CLAPP.

About four years ago, a dam was built across the Charles River at Boston. Above this dam, nearly four miles of the river, which was formerly salt and full of marine life, is now fresh water. In the NAUTILUS, Vol. 25, p. 132, Mr. C. W. Johnson writes of a colony of *Modiolus demissus* v. *plicatulus* Lam., which until a few years ago, lived about two miles above the dam. I collected a very fine set of *Paludestrina salsa* Pils., and a few *Odostomia bisuturalis* and *trifida*, in 1893, nearly three miles above where the dam now stands. But records of the marine molluscan fauna of this part of the river seem to be very scarce.

In August, 1912, Dr. Walter Faxon brought me three specimens of *Radix auricularia* (Linn.), which he had found very near the place where I had collected *P. salsa*, and *O. bisuturalis* and *trifida* in 1893. In October, 1912, Dr. Faxon and I collecting again at this spot, secured several more specimens, varying in age from very young to fully mature. All we found were on *Chara*, and in more or less deep and exposed parts of the river. I examined quantities of *Potamogeton* without securing a specimen, but nearly every clump of *Chara* yielded at least one. In the shallow sheltered coves and ditches we found great quantities of *Galba palustris*, *Planorbis trivolvis*, *Planorbis albus*, *Physa heterostropha* and *Ancyclus parallelus* but these species all avoided the deep water of the river as surely as *R. auricularia* kept away from the shallow places. I have never found *Galba palustris*, *P. trivolvis*, or *R. auricularia* in that part of the river above Watertown which has always been fresh water. The common species there are *Pseudo succinea columella* and *Planorbis bicarinatus*, neither of which have yet been found in the river at Cambridge.

There are numerous explanations for the sudden appearance of exotic species in unexpected localities. A very popular, and probably in many cases a true one, is that they have escaped from some nearby greenhouse. In support of this theory, I will admit that there are several greenhouses in Cambridge, and that from some of them to the river would be but a short walk, but a comparatively long crawl.

SPHÆRIIDÆ OLD AND NEW, III.

BY V. SÆRKL.

P. COLUMBIANUM,¹ n. sp.—Mussel of medium size, strongly inflated, outlines (along the valve edges) oval to elliptic without any angles, beaks somewhat behind the middle, large, prominent, rounded or slightly flattened on top, or even calyculate; surface more or less uneven from lines of growth, somewhat shining, with fine irregular striæ, color light corneous to yellowish, often in alternating zones, shell thin, sub-translucent; hinge rather slight, cardinal teeth small, the right curved with the posterior end thicker, left

¹The name is not strictly in conformity with the rules, but appears preferable to *columbiense*.